

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

MICHAEL ABRACZINSKAS  
Director



XXX xx, 2020

Mr. John Judd  
Plant Manager  
Consolidated Diesel Company  
9377 US Hwy 301 North  
PO Box 670  
Whitakers, NC 27891

Dear Mr. Judd:

SUBJECT: Air Quality Permit No. 04620T31  
Facility ID No. 6400232  
Consolidated Diesel Company  
Whitakers, Nash County, North Carolina  
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for a 1<sup>st</sup> step Significant Modification in accordance with 02Q .0501(c)(2), a Renewal and a Minor modification of your Title V permit received June 22, 2020, October 25, 2019 and December 02, 2019, respectively, we are forwarding herewith Air Quality Permit No. 04620T31 to Consolidated Diesel Company, 9377 US Highway 301 North, Whitakers, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as "ATTACHMENT 1" to this cover letter. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official, it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the



North Carolina Department of Environmental Quality | Division of Air Quality  
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641  
919.707.8400

Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing.

Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Nash County has triggered increment tracking under PSD for PM<sub>10</sub> and SO<sub>2</sub>. This modification/renewal will result in an increase in 0.020 pounds per hour of PM<sub>10</sub> and 0.023 pounds per hour of SO<sub>2</sub> emissions for each triggered pollutant.

This Air Quality Permit shall be effective from XXX xx, 2020 until XXX xx, 2025, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Gautam Patnaik, P.E., at 919-707-8735 or [gautam.patnaik@ncdenr.gov](mailto:gautam.patnaik@ncdenr.gov).

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section  
Division of Air Quality, NCDEQ

Enclosure

c: Kelly Fortion, EPA Region 4  
Raleigh Regional Office  
Connie Horne  
Central Files

Attachment to cover letter of Permit 04620T31  
 Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID	Emission Source Description
IS-ES1	Mist Collectors
IS-ES2.1 through IS-ES2.21	21 spray washer tanks
IS-ES-2CPO	Electric-heated cleaning and phosphating washer and oven
IS-ES3	Electric connecting rod washer and connecting rod preservation washer
IS-ES4	Dry filter paint booth
IS-ES5.1 and IS-ES5.2	Two diesel fuel storage tanks (10,000 gallons capacity, each)
IS-RPS	Miscellaneous rust prevention
IS-SPA	Satellite painting areas
IS-ES7.1 and IS-ES7.2	Two fuel oil storage tanks (8,000 gallons capacity, each)
IS-ES8	One biodiesel storage tank (8,000 gallons capacity)
IS-ES9.1 and IS-ES9.2	Two non-combustion cold test stands
IS-9DG ( <b>GACT ZZZZ</b> )	Emergency diesel-fired generator (605 brake horsepower)
IES-DST	One diesel storage tank (20,000 gallon capacity)
IS-ES-IS1B	A steam generating unit consisting of four natural gas-fired boilers with a maximum heat input of 5 million Btu per hour, each.
IS-ES-3B-2	Natural gas-fired boiler with a maximum heat input of 1.2 million Btu per hour.
IS-ES-T1 ( <b>GACT CCCCCC</b> )	8,000-gallon gasoline above-ground storage tank

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows:  
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

## Summary of Changes to Permit

The following changes were made to the Consolidated Diesel Company – Whitakers, Air Permit No. 04620T30:

Page(s)	Section	Description of Change(s)
Cover letter		Change in name of Responsible Officer for this facility
Insignificant activities list	Steam generating unit (IS-ES-IS1B, natural gas-fired boiler (IS-ES-3B-2 and above-ground gasoline storage tank (IS-ES-T1).	These new sources were added
ES-8NDTS through ES-13NDTS	Units never constructed.	Diesel/biodiesel/natural gas test stands (3.0 MMBtu/hr max. heat input capacity, each)
3 through 5	table of summary of all permitted emission sources	Renumbered the reference pages
3 through 6	Permitted emission sources and associated air pollution control devices table	Removed all reference to Case by Case MACT; MACT DDDDD and MACT PPPPP.
3 through 6	Permitted emission sources and associated air pollution control devices table	Removed word “Subpart” from the permit sources table
5	Permitted emission sources and associated air pollution control devices table	diesel-fired generator (ES-3ADG subject to MACT ZZZZ and NSPS IIII)
5	2.1 A.	Added reference to 2Q .0317 MACT Avoidance
7	2.1 B.	Added reference to 2Q .0317 MACT Avoidance
8	2.1 C.	Added reference to 2Q .0317 MACT Avoidance
10	2.1 D.	Added reference to 2Q .0317 MACT Avoidance
12	2.1 E.	Added reference to 2Q .0317 MACT Avoidance
13	2.1 E. 2. c.,	Establish “normal” for these eight diesel/ biodiesel/gasoline/natural gas engine test stands (ID Nos. ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS and ES-8PTS) in the first 30 days following the effective date of the beginning of operation.
14	2.1 F.	Added reference to 2Q .0317 MACT Avoidance
15 through 19	2.1 F. 3.,	Added Subpart ZZZZ (for existing sources ID Nos. ES-2DG and ES-4DG through ES-8DG)
16	2.1 F. 3. n. iii.,	For the six existing diesel generators (ID Nos. ES-2DG and ES-4DG through ES-8DG) conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
19 to 20	2.1 F. 4.,	Applicability of NSPS Subpart IIII for new non-emergency engine (ID No. ES-3ADG).
20	2.1 F. 5.,	Applicability of MACT Subpart ZZZZ for new non-emergency engine (ID No. ES-3ADG).
21	2.1 G.	Added reference to 2Q .0317 MACT Avoidance
23	2.1 H.	Added reference to 2Q .0317 MACT Avoidance
24	2.1 I.	Added reference to 2Q .0317 MACT Avoidance
25	2.1 J.	Added reference to 2Q .0317 MACT Avoidance
27	2.1 J. 4.,	Applicability of MACT Subpart ZZZZ for new natural gas-fired peak shaving generator (ID Nos. ES-ING)
28	2.2 A.	2Q .0317 MACT avoidance limits.
29	2.2 B.	Remove toxics limits for some sources
30 to 31	2.2 C. 1.,	New PSD avoidance limits for gasoline and diesel fuel usage.
30 to 31	2.2 C. 1. b., through d.,	New monitoring and record keeping requirements for gasoline and diesel fuel usage
33	2.3	Permit Shield for Non-applicable Requirements

Page(s)	Section	Description of Change(s)
34 through 42	General Conditions	Updated to current revision
Sources from previous permit (Permit No. 04620T30) that were removed		
ES-8NDTS through ES-13NDTS	Units never constructed.	Diesel/biodiesel/natural gas test stands (3.0 MMBtu/hr max. heat input capacity, each)
ES-11DTS through ES-17DTS	Units never constructed.	Diesel/biodiesel/natural gas test stands (3.0 MMBtu/hr max. heat input capacity, each)
ES-1CBP and ES-BBP	Units converted to electric power.	Two natural gas/propane fired primary block washers (2 .6 and 3.9 MMBtu/hr maximum heat input capacity, respectively)
ES-CH	Unit converted to electric power.	One natural gas/propane-fired primary head washer (1.8 MMBtu/hr maximum heat input capacity)
ES-1B and ES-2B	Units converted to electric power.	Two watertube-type natural gas/propane fired boilers (12 MMBtu/hr maximum heat input, each)
ES-3B	Replaced by new insignificant source IS-ES-3B-2	Two watertube-type natural gas/propane fired boilers (12 MMBtu/hr maximum heat input, each)
ES-BH, ES-CBF, ES-1CRP, and ES-1CRF	Units converted to electric power.	Four natural gas/propane fired washers (1.8, 0.5, 1.6, and 2.4 MMBtu/hr heat input capacity, respectively)
Sources Modified from previous permit (Permit No. 04620T30)		
ES-1DTS, ES-2DTS, ES-3DTS, ES-4DTS, ES-5DTS, ES-6DTS, ES-7DTS, ES-8DTS, ES-9DTS, and ES-10DTS.		These sources were modified to burn <b>gasoline</b> as a new fuel.  Applicant also, requested above sources ID Nos. changed to the Nos., below: ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-6PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, and ES-10DTS
ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-NDTS, ES-5NDTS, ES-6NDTS, and ES-7NDTS		These sources were modified to burn gasoline as a new fuel.



State of North Carolina  
Department of Environmental Quality  
Division of Air Quality

## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
04620T31	04620T30	XXX xx, 2020	XXX xx, 2025

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

**Permittee:** **Consolidated Diesel Company**

**Facility ID:** **6400232**

**Facility Site Location:** **9377 US Highway 301 North**  
**City, County, State, Zip:** **Whitakers, Nash County, North Carolina, 27891**

**Mailing Address:** **9377 US Hwy 301 North, PO Box 670**  
**City, State, Zip:** **Whitakers, North Carolina, 27891**

**Application Numbers:** **6400232.19A, 6400232.19B and 6400232.19C**  
**Complete Application Date:** **June 22, 2020, October 25, 2019 and December 2, 2019**

**Primary SIC Code:** **3519**  
**Division of Air Quality,**  
**Regional Office Address:** **Raleigh Regional Office**  
**3800 Barrett Drive**  
**Raleigh, North Carolina, 27609**

Permit issued this the xx<sup>th</sup> of XXX, 2020.

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William D. Willets, P.E., Chief, Air Permitting Section  
By Authority of the Environmental Management Commission

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ATTACHMENT

List of Acronyms

## SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
5	ES-BBK	One B-block line dry machining press	DCBBK1, DCBBK2, DCBBK3, DCBBK4, DCBBK5, DCBBK6	Six dry cartridge filters (29,040 square feet of filter area, each)
5	ES-BHD	One B-head line dry machining process	DCBHD1, DCBHD2, DCBHD3	Three dry cartridge filters (19,360 square feet of filter area, each)
5	ES-CBK	One C-block line dry machining process	DCCBK1, DCCBK2, DCCBK3, DCCBK4, DCCBK5	Five dry cartridge filters (19,360 square feet of filter area, each)
5	ES-CHD	One C-head line dry machining process	DCCHD1, DCCHD2, DCCHD3	Three dry cartridge filters (19,360 square feet of filter area, each)
7	ES-1CPO	One natural gas-fired cleaning and phosphating washer and oven (4.7 million Btu per hour maximum heat input capacity)	NA	NA
8	ES-1SB	One wet basin spray booth	NA	NA
8	ES-2SB	One touch up spray booth	NA	NA
8	ES-3SB, ES-4SB, and ES-5SB	Three dry filter spray booths	NA	NA
10	ES-1PDO	One natural gas-fired paint dry oven (2.5 million Btu per hour maximum heat input capacity)	NA	NA



Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
10	ES-2PDO	One natural gas-fired paint dry oven (1.0 million Btu per hour maximum heat input capacity)	NA	NA
12	ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, and ES-7NDTS	Seven diesel/biodiesel/ <b>gasoline</b> /natural gas engine test stands (3.0 MMBtu/hr maximum heat input capacity, each)	NA	NA
12	ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-6PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, and ES-10DTS	Twelve diesel/ biodiesel/ <b>gasoline</b> /natural gas engine test stands (3.0 MMBtu/hr maximum heat input capacity, each)	NA	NA
12	ES-18DTS	One diesel/ biodiesel/ <b>gasoline</b> /natural gas engine test (1.8 million Btu per hour maximum heat input capacity)	NA	NA
14	ES-2DG, ES-4DG, ES-5DG, ES-6DG, ES-7DG, and ES-8DG ( <b>GACT ZZZZ</b> )	Six diesel-fired generators (10.8 million Btu per hour maximum heat input capacity each on Nos. 2DG, and 4DG through 7DG; and 18.8 million Btu per hour maximum heat input capacity on No. 8DG)	CD-3, CD-4, CD-5, CD-6, CD-7, CD-8	Six catalytic oxidizers (one installed on each of the generators)
14	<sup>1</sup> ES-3ADG ( <b>GACT ZZZZ; NSPS III</b> )	One diesel-fired generator (12.33 million Btu per hour maximum heat input capacity, 1,850 brake horsepower)	CD-1	Catalytic oxidizer
23	ES-1RPS	One automatic rust prevention station	NA	NA
24	ES-1ES, and ES-1EN	Two natural gas/propane fired washers (1.5, and 1.5 million Btu per hour maximum heat input capacity, respectively)	NA	NA
29	ES6	One natural gas-fired boiler (0.75 million Btu per hour maximum heat input capacity)	NA	NA

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
30	<sup>1</sup> ES-1NG (GACT ZZZZ; NSPS JJJJ)	One four-cycle, lean burn, natural gas-fired peak shaving generator (20 million Btu per hour maximum heat input capacity)	CD-2	Catalytic oxidizer

<sup>1</sup>A new or stationary source located at an area source must meet the requirements of this subpart by meeting the requirements of 40 CFR Part 60, Subpart IIII for compression-ignition engines or 40 CFR Part 60, Subpart JJJJ for spark ignition engines [40 CFR §63.6590(c)(1)].

## SECTION 2- SPECIFIC LIMITATIONS AND CONDITIONS

### 2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

#### A. Dry machining processes:

- One B-block line dry machining process (ID No. ES-BBK) with associated six dry cartridge type filters (ID Nos. DCBBK1 through DCBBK6)
- One B-head line dry machining process (ID No. ES-BHD) with associated three dry cartridge type filters (ID Nos. DCBHD1 through DCBHD3)
- One C-block line dry machining process (ID No. ES-CBK) with associated five dry cartridge type filters (ID Nos. DCCBK1 through DCCBK5)
- One C-head line dry machining process (ID No. ES-CHD) with associated three dry cartridge type filters (ID Nos. DCCHD1 through DCCHD3)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521

#### 1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- Emissions of particulate matter from these sources (ID Nos. ES-BBK, ES-BHD, ES-CBK, and ES-CHD) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

**Monitoring** [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from these sources (**ID Nos. ES-BBK, ES-BHD, ES-CBK, and ES-CHD**) shall be controlled by cartridge filters (**ID Nos. DCBBK1 through DCBBK6, DCBHD1 through DCBHD3, DCCBK1 through DCCBK5, and DCCHD1 through DCCHD3**) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirements shall include the following:
  - i. a monthly visual inspection of the system ductwork and material collection units for leaks; and
  - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the cartridge filter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and cartridge filters are not inspected and maintained.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed on the cartridge filters; and
  - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the cartridge filters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these sources (**ID Nos. ES-BBK, ES-BHD, ES-CBK, and ES-CHD**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-BBK, ES-BHD, ES-CBK, and ES-CHD**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a above.

If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**B. One natural gas-fired cleaning and phosphating washer and oven (ID No. ES-1CPO)**

The following table provides a summary of limits and/or standards for the emission source(s) described above.

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Particulate matter	0.39 pounds of particulate per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen oxides and volatile organic compounds	<b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)

**1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from this source into the atmosphere shall not exceed 0.39 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in paragraph a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in this source.

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from this source (**ID No. ES-1CPO**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in this source (**ID No. ES-1CPO**).

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from this source (**ID No. ES-1CPO**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of this source (**ID No. ES-1CPO**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.3.a above.
- If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
  - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**C. Spray booths:**

- **One wet basin spray booth (ID No. ES-1SB)**
- **One touchup spray booth (ID No. ES-2SB)**
- **Three dry filter spray booths (ID Nos. ES-3SB, ES-4SB and ES-5SB)**

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	<b>State-enforceable only</b> Emission limits for toxic air pollutants. <b>See Section 2.2 B</b>	15A NCAC 02D .1100
Nitrogen oxides and volatile organic compounds	Operating limits for sources of VOC <b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)

## 1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources (**ID Nos. ES-1SB, ES-2SB, ES-3SB, ES-4SB and ES-5SB**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

### **Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

### **Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- c. The Permittee shall maintain production records such that the process rates “P” in tons per hour, as specified by the formula above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.

### **Reporting** [15A NCAC 02Q .0508(f)]

- d. No reporting is required for particulate emissions from the firing of natural gas in these sources (**ID Nos. ES-1SB, ES-2SB, ES-3SB, ES-4SB and ES-5SB**).

## 2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. ES-1SB, ES-2SB, ES-3SB, ES-4SB and ES-5SB**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

### **Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

### **Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-1SB, ES-2SB, ES-3SB, ES-4SB and ES-5SB**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a above.

If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the

Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**D. Two natural gas-fired paint dry ovens (ID No. ES-1PDO and ES-2PDO)**

The following table provides a summary of limits and/or standards for the emission source(s) described above.

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Particulate matter	0.39 pounds of particulate per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen oxides and volatile organic compounds	<b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	<b>See Section 2.2 A</b>	15A NCAC 02Q .0317 (MACT Avoidance)

**1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from this source into the atmosphere shall not exceed 0.39 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in paragraph a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in this source.

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-1PDO and ES-2PDO**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in this source (**ID No. ES-1PDO**).

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these sources (**ID Nos. ES-1PDO and ES-2PDO**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-1PDO and ES-2PDO**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.3.a above.

If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**E. Test stands:**

- **One diesel/ biodiesel/gasoline/natural gas engine test (1.8 million Btu per hour maximum heat input capacity, ID No. ES-18DTS)**
- **Seven diesel/ biodiesel/gasoline/natural gas engine test stands (3.0 MMBtu/hr maximum heat input capacity, each, ID Nos. ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, and ES-7NDTS); And**
- **Twelve diesel/ biodiesel/gasoline/natural gas engine test stands (3.0 MMBtu/hr maximum heat input capacity, each, ID Nos. ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-6PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, and ES-10DTS)**



The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Toxic air pollutants	<b>State-enforceable only</b> Emission limits for toxic air pollutants. <b>See Section 2.2 B</b>	15A NCAC 02D .1100
Nitrogen oxides and volatile organic compounds	Operating limits for sources of NO <sub>x</sub> <b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	<b>See Section 2.2 A</b>	15A NCAC 02Q .0317 (MACT Avoidance)

## 1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, ES-7NDTS, ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, ES-10DTS and ES-18DTS**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

### **Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

### **Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel, biodiesel, gasoline and natural gas in these sources (**ID Nos. ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, ES-7NDTS, ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, ES-10DTS and ES-18DTS**).

## 2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, ES-7NDTS, ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, ES-10DTS and ES-18DTS**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

### **Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

### **Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, ES-7NDTS, ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, ES-10DTS and ES-18DTS**) for any visible emissions above normal. The Permittee shall establish “normal” for these eight diesel/biodiesel/gasoline/natural gas engine test stands (**ID Nos. ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS and ES-8PTS**) in the first 30 days following the effective date of the beginning of operation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.2.a above.

If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**F. Seven diesel generators (ID Nos. ES-2DG, ES-3ADG, and ES-4DG through ES-8DG)**

The following table provides a summary of limits and/or standards for the emission source(s) described above.

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
NMHC and NO <sub>x</sub> , CO, PM, SO <sub>2</sub>	<b>(ID No. ES-3ADG only)</b> NSPS emission standards	15A NCAC 02D .0524 (40 CFR 60, Subpart IIII)
Hazardous air pollutants	For sources 2.1.F.3 (ES-2DG and ES-4DG through ES-8DG, Section 2.1.F.3) and (ES-3ADG, Section 2.1.F.5)	15A NCAC 02D .1111 (GACT Subpart ZZZZ)
Nitrogen oxides and volatile organic compounds	Operating limits for sources of NO <sub>x</sub> <b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	<b>See Section 2.2 A</b>	15A NCAC 02Q .0317 (MACT Avoidance)

**1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-2DG, ES-3ADG, and ES-4DG through ES-8DG**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel in these sources (**ID Nos. ES-2DG, ES-3ADG, and ES-4DG through ES-8DG**).

**2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these sources (**ID Nos. ES-2DG, ES-3ADG, and ES-4DG through ES-8DG**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring** [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-2DG, ES-3ADG, and ES-4DG through ES-8DG**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 F.2.a above.If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY Subpart ZZZZ (for existing sources ID Nos. ES-2DG and ES-4DG through ES-8DG)**

**Applicability** [40 CFR 63.6585, 63.6590(a)(1)(i)]

- a. For these **six existing** diesel generators (ID Nos. **ES-2DG and ES-4DG through ES-8DG**) (existing stationary RICE rated greater than 500 BHP <sup>1</sup>**located at an area source of HAP emissions**), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ — National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines." and Subpart A "General Provisions."

**Definitions and Nomenclature**

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

**Applicability Date** [40 CFR 63.6595(a)(1)]

- c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.

**General Provisions** [40 CFR 63.6665]

- d. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of MACT Subpart ZZZZ

**Notifications** [40 CFR 63.6645(a)(2)]

- e. i. The Permittee shall submit all of the notifications in the following regulations that apply by the dates specified:

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<sup>1</sup> As per Section 2.2.A.1. a., of this permit the facility is an area source of HAP emissions.

- (A) 40 CFR §63.7(b) [*performance testing*] and (c) [*quality assurance program*];
- (B) 40 CFR §63.8(e) [*performance evaluation of CPMS*], (f)(4) and (f)(6) [*alternative monitoring methods*]; and
- (C) 40 CFR §63.9(b) through (e), and (g) and (h) [*initial notifications*].
- ii. The Permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR §63.7(b)(1). [40 CFR §63.6645(g)]
- iii. For each performance test, the Permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR §63.9(h)(2)(ii) and 63.10(d)(2). [40 CFR §63.6630(c), 63.6645(h)]
- iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the notification requirements in **Section 2.1 F. 3. e.**, above, are not met.

**General Compliance Requirements** [15A NCAC 02Q .0508(b) and 40 CFR §63.6605(a)]

- f. i. The permittee shall be in compliance with the emission limitations, operating limitations and other requirements that apply at all times. [40 CFR §63.6605(a)]
- ii. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR §63.6605(b)]
- iii. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in **Section 2.1 F. 3. f.**, above, are not met.

**Fuel Requirements** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall use diesel fuel in the engine with:
  - i. a maximum sulfur content of 15 ppm; and
  - ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
 [40 CFR §63.6604(a) and 40 CFR §80.510(b)]

**Emissions and Operating Limitations** [15A NCAC 02Q .0508(b)]

- h. The Permittee shall:
  - i. limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O<sub>2</sub>; or
  - ii. reduce CO emissions by 70 percent or more, using an oxidation catalyst.
 [40 CFR §63.6603(a), MACT Subpart ZZZZ Table 2b and Table 2d]
- i. The Permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. [40 CFR 63.6600(d), Table 2b]
- j. The Permittee shall maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the most recent performance test. [40 CFR §63.6603(a), MACT Subpart ZZZZ Table 2b]
- k. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h), MACT Subpart ZZZZ Table 2d]
- l. If the engines are not equipped with a closed crankcase ventilation system, the Permittee shall comply with either subparagraph i or ii. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements.
  - i. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
  - ii. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

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<sup>2</sup> 100 percent load is only for new engines

[40 CFR §63.6625(g)]

- m. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 F. 3. g. through l., above, are not met.

**Testing Requirements** [15A NCAC 02Q .0508(b)]

- n. i. The Permittee shall conduct initial and subsequent performance tests to demonstrate compliance with the limitations in Section 2.1 F. 4. h. and i., above. [40 CFR §63.6620(a)]
- ii. The Permittee shall conduct the initial performance test within 180 days after May 3, 2013 and according to the provisions in 40 CFR §63.7(a)(2). [40 CFR §63.6610(a)]
- iii. The Permittee **shall conduct subsequent performance tests every 8,760 hours or 3 years**, whichever comes first. [40 CFR §63.6615, MACT Subpart ZZZZ Table 3]
- iv. Each performance test shall be conducted according to the requirements of MACT Subpart ZZZZ Table 4. If a non-operational stationary RICE is subject to performance testing, the Permittee does not need to start up the engine solely to conduct the performance test. The Permittee can conduct the performance test when the engine is started up again. [40 CFR §63.6620(a) and (b)]
- v. The Permittee shall demonstrate initial compliance with the limitations in Section 2.1 F. 3. h, i, and j., above, according to MACT Subpart ZZZZ Table 5. [40 CFR §63.6630(a)]
- vi. If the catalyst is changed, the Permittee shall reestablish the values of the operating parameters measured during the initial performance test. When reestablishing the values of the operating parameters, the Permittee shall also conduct a performance test to demonstrate that the required emission limitation applicable to the stationary RICE is met. [40 CFR §63.6640(b)]
- vii. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 F. 3. n., above, are not met.

**Monitoring** [15A NCAC 02Q .0508(f)]

- o. i. The Permittee shall install, operate, and maintain continuous parameter monitoring systems (CPMS) to monitor the catalyst inlet temperature for each catalyst and reduce the temperature data to 4- hour rolling averages. The Permittee shall maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature in Section 2.1 F. 3. i., above. [MACT Subpart ZZZZ Table 5, 40 CFR §63.6625(b), 40 CFR § 63.6640(a) and MACT Subpart ZZZZ Table 6]
- ii. The Permittee shall measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the performance test per Section 2.1 F. 3. j., above. [MACT Subpart ZZZZ Table 5, 40 CFR §63.6640(a) and MACT Subpart ZZZZ Table 6]
- iii. The Permittee shall install, operate, and maintain each CPMS according to the requirements in paragraphs (A) through (G): [40 CFR § 63.6625(b)]
  - (A) The Permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of 40 CFR §63.6625 and in 40 CFR §63.8(d).
  - (B) The Permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan.
  - (C) The CPMS must collect data at least once every 15 minutes (see also 40 CFR § 63.6635).
  - (D) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
  - (F) The Permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
  - (G) The Permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.
- iii. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the requirements in Section 2.1 F. 3. o., above, are not met.
- p. i. The Permittee shall monitor and collect data as follows:
  - (A) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the Permittee shall monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
  - (B) The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating

levels. The Permittee shall, however, use all the valid data collected during all other periods. [40 CFR §63.6635]

- ii. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 F. 3. p., above, are not met.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- q. The Permittee shall keep records of the following monitoring data:
  - i. catalyst(s) inlet temperature data including the 4-hour rolling averages; and
  - ii. the monthly measurements of the pressure drop across the catalyst(s). [40 CFR §63.6655(d)]
- r. The Permittee shall keep the following:
  - i. A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv).
  - ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
  - iii. Records of performance tests and performance evaluations as required in 40 CFR §63.10(b)(2)(viii).
  - iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - v. Records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.1 F. 3. f. ii., above, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR §63.6655(a)]
- s. For each inlet catalyst temperature CPMS, the Permittee shall keep the following records:
  - i. Records described in 40 CFR §63.10(b)(2)(vi) through (xi).
  - ii. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR §63.8(d)(3).
  - iii. Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR §63.8(f)(6)(i), if applicable. [40 CFR §63.6655(b)]
- t. The Permittee shall keep each record in a form suitable and readily accessible for expeditious review in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR § 63.10(b)(1). [40 CFR §63.6660]
- u. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 F. 3. q., through u., above, are not met.

**Reporting** [15A NCAC 02Q .0508(f)]

- v. The permittee shall submit a compliance report semiannually postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit must be clearly identified. [40 CFR §63.6650(a),(b)(5) and 40 CFR §63.6650(f)]
- w. The compliance report must contain:
  - i. Company name and address;
  - ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report; and
  - iii. Date of report and beginning and ending dates of the reporting period.
  - iv. If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Section 2.1 F. 3. f. ii., above, including actions taken to correct a malfunction.
  - v. If there are no instances of noncompliance from any emission or operating limitations that apply, a statement that there were no instances of noncompliance from the emission or operating limitations during the reporting period.
  - vi. If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period. [40 CFR §63.6650(c)]
- x. For each instance of noncompliance from an emission or operating limitation that occurs for the stationary RICE where the Permittee is **not using a CMS** to comply with the emission or operating limitations, the compliance report must contain the information in Section 2.1 F. 3. w. i., through iv., above, and the following information:

- i. The total operating time of the stationary RICE at which the instance of noncompliance occurred during the reporting period.
- ii. Information on the number, duration, and cause of instances of noncompliance (including unknown cause, if applicable), as applicable, and the corrective action taken.  
[40 CFR §63.6650(d)]
- y. For each instance of noncompliance from an emission or operating limitation occurring for a stationary RICE where the Permittee **is using a CMS** to comply with the emission and operating limitations in this subpart, the Permittee shall include information in Section 2.1 F. 3. w. i., through iv., above, and the following information:
  - i. The date and time that each malfunction started and stopped.
  - ii. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
  - iv. The date and time that each instance of noncompliance started and stopped, and whether each instance of noncompliance occurred during a period of malfunction or during another period.
  - v. A summary of the total duration of the instances of noncompliance during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
  - vi. A breakdown of the total duration of the instances of noncompliance during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
  - vii. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
  - viii. An identification of each parameter and pollutant that was monitored at the stationary RICE.
  - ix. A brief description of the stationary RICE.
  - x. A brief description of the CMS.
  - xi. The date of the latest CMS certification or audit.
  - xii. A description of any changes in CMS, processes, or controls since the last reporting period.  
[40 CFR §63.6650(e)]
- z. The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 02D .1111 if Sections 2.1 F. 3. v., through y., above, are not met.

**4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS Subpart IIII (for new non-emergency engines all BHP and less than 10 L per cylinder, ID. No. ES-3ADG)**

**Applicability** [15A NCAC 002Q .0508(f), 40 CFR 60.4200(a)(2)(i) ]

- a. For **new** diesel-fired generator (12.33 million Btu per hour maximum heat input capacity, 1,850 brake horsepower, ES-3ADG), the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," including Subpart A "General Provisions."  
[40 CFR §60.4200(a)(2)(i) "Manufactured after April 1, 2006, and are not fire pump engines"]

**General Provisions** [15A NCAC 02Q .0508(f)]

- b. Pursuant to 40 CFR 60 .4218, The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of NSPS Subpart IIII.

**Emission Standards** [15A NCAC 02Q .0508(f)]

- c. The Permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR 60.4201 for the same model year and maximum engine power for this engine. [40CFR 60.4204(b) "2007 model year and later non-emergency stationary CI ICE"]

**Fuel Requirements** [15A NCAC 02Q .0508(f)]

- d. The Permittee shall use diesel fuel in the engine with:
  - i. a maximum sulfur content of 15 ppm; and
  - ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.  
[40 CFR 60.4207(b) "CI ICE .... with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel"]

**Testing** [15A NCAC 02Q .0508(f)]

- e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the

results of this test are above the limits given in Sections 2.1 f. 4. c., and d., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

**Monitoring** [15A NCAC 02Q .0508(f)]

- f. The engine has the following monitoring requirements:
  - i. The engine, if equipped with a diesel particulate filter, must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40CFR 60.4209(b)]

**Compliance Requirements** [15A NCAC 02Q .0508(b)]

- g. The Permittee shall:
  - i. operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine;
  - ii. change only those emission-related settings that are permitted by the manufacturer; and
  - iii. meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable. [40CFR 60.4206 and 60.4211(a)]
- h. The Permittee shall comply with the emission standards in Section 2.1 F. 4. c., above, by purchasing an engine certified to the emission standards in Section 2.1 F.4. c., above. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40CFR 60.4211(c)]
- i. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if the requirements in Sections 2.1 F. 4. f., through h., above, are not met.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- j. To ensure compliance, the Permittee shall perform inspections and maintenance on the engine as recommended by the manufacturer per 40 CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed on the engine;
  - iv. any variance from manufacturer's recommendations, if any, and corrections made;
  - v. if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)]; and
  - vi. documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1 F. 4. c., above.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

**Reporting** [15A NCAC 02Q .0508(f)]

- k. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.

**5. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY Subpart ZZZZ for a (new Non-Emergency, Greater than 500 BHP, with reduce carbon monoxide (CO) emissions, with oxidation catalyst and continuous parameter monitoring system [CPMS]) source ID. No. ES-3AG).**

- a. Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that is a new or reconstructed compression ignition stationary RICE located at an area source must meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII (See Section 2.1.F.4., above). No further requirements apply for such engines under Part 63 [40 CFR 63.6590(c)(1)].



**G. Boilers:**

- **One natural gas-fired boiler (ID No. ES6)**

The following table provides a summary of limits and/or standards for the emission source(s) described above.

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Particulate matter	0.47 pounds per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen oxides and volatile organic compounds	<b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	<b>See Section 2.2 A</b>	15A NCAC 02Q .0317 (MACT Avoidance)

**1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- Emissions of particulate matter from the combustion of natural gas/propane that are discharged from this source (**ID No. ES6**) into the atmosphere shall not exceed 0.47 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas/propane in this source (**ID No. ES6**).

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- Emissions of sulfur dioxide from this source (**ID No. ES6**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- No monitoring/recordkeeping/reporting is required for sulfur dioxide from the firing of natural gas/propane in this source (**ID No. ES6**).

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- Visible emissions from this source (**ID No. ES6**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.3.a above, the Permittee shall be deemed in noncompliance

with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas/propane in this source (**ID No. ES6**).

**H. One automatic rust prevention station (ID No. ES-1RPS)**

The following table provides a summary of limits and/or standards for the emission source(s) described above.

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Nitrogen oxides and volatile organic compounds	Emission limits for VOC <b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	<b>See Section 2.2 A</b>	15A NCAC 02Q .0317 (MACT Avoidance)

**I. Two natural gas/propane-fired washers (ID Nos. ES-1ES, and ES-1EN)**

The following table provides a summary of limits and/or standards for the emission source(s) described above.

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Particulate matter	0.39 pounds of particulate per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen oxides and volatile organic compounds	Operating limits for sources of NO <sub>x</sub> <b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	<b>See Section 2.2 A</b>	15A NCAC 02Q .0317 (MACT Avoidance)

**1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- a. Emissions of particulate matter from the combustion of natural gas and/or propane that are discharged from this source into the atmosphere shall not exceed 0.39 pounds per million Btu heat input.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in paragraph a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas and/or propane in this source.

**2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-1ES, and ES-1EN**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I. 2. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas/propane in these sources (**ID Nos. ES-1ES, and ES-1EN**).

**3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from these sources (**ID Nos. ES-1ES, and ES-1EN**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I. 3. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- b. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas/propane in these sources (**ID Nos. ES-1ES, and ES-1EN**).

**J. One four-cycle, lean burn, natural gas-fired peak shaving generator (20 million Btu per hour maximum heat input capacity, (ID Nos. ES-1NG))**

The following table provides a summary of limits and/or standards for the emission source(s) described above.

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
NO <sub>x</sub> , CO, and VOC	NSPS emission limits <b>See Section 2.1.J. 3.</b>	15A NCAC 02D .0524 (40 CFR 60, Subpart JJJJ)
Hazardous air pollutants	GA <sup>CT</sup> emission limits <b>See Section 2.1.J. 4.</b>	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)
Nitrogen oxides and volatile organic compounds	Operating limits for sources of NO <sub>x</sub> <b>See Section 2.2 C</b>	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	<b>See Section 2.2 A</b>	15A NCAC 02Q .0317 (MACT Avoidance)

**1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from the natural gas-fired peak shaving generator (**ID No. ES-1NG**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in the natural gas-fired peak shaving generator (**ID No. ES-1NG**).

**2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS**

- a. Visible emissions from the natural gas-fired peak generator (**ID Nos. ES-1NG**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in the natural gas-fired peak shaving generator (**ID No. ES-1NG**).

**3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS**

[40 CFR Part 60, Subpart JJJJ]

*(For non-emergency IC engines)***Applicability** [15A NCAC 02Q .0508(f), 40 CFR 60.4230(a)(4)(i)]

- a. The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart JJJJ, including Subpart A "General Provisions" for the natural gas-fired peak shaving generator (**ID No. ES-1NG**).

**General Provisions** [15A NCAC 02Q .0508(f)]

- b. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60 .4246]

**Emission Standards** [15A NCAC 02Q .0508(f)]

- c. The Permittee shall comply with the following emission standards for the natural gas-fired peak shaving generator (**ID No. ES-1NG**). If the natural gas-fired peak shaving generator (**ID No. ES-1NG**) is meeting the requirements of Section 2.1.J.3.e, below, the generator does not have to comply with the CO emission standards listed below.

[40 CFR 60.4233(e), 40 CFR 60 Table 1 to Subpart JJJJ]

*Excerpt from Table 1 to 40 CFR Part 60, Table 1*

Engine type	Maximum engine power	Manufacture date (after)	Emission standards <sup>a</sup>					
			g/hp-hr			ppmvd @ 15% O <sub>2</sub>		
			NO <sub>x</sub>	CO	VOC <sup>b</sup>	NO <sub>x</sub>	CO	VOC <sup>b</sup>
Non-Emergency, SI, Natural Gas	HP ≥ 500 bhp	7/1/2010	1.0	2.0	0.7	82	270	60

\*a. Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O<sub>2</sub>.

\*b. For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

**Testing** [15A NCAC 02Q .0508(f)]

- d. i. The Permittee shall conduct an initial performance test. The testing shall be conducted in accordance with 60.4244(a) through (f) and General Condition JJ. The initial performance test was conducted on July 1, 2014.

- ii. The Permittee shall conduct a subsequent performance test every 8,760 hours of engine operation or 3 calendar years, whichever comes first. The testing shall be conducted in accordance with 60.4244(a) through (f) and General Condition JJ.  
[40 CFR 60 .4243(ab)(2)(ii)]

If the results of these tests are above the limits given in Section 2.1.J.3.c, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

**Compliance Requirements** [15A NCAC 02Q .0508(b)]

- e. The Permittee shall comply with the emission standards in Section 2.1.J.3.c, above, by keeping a maintenance plan and records of conducted maintenance. Furthermore, the Permittee shall operate the engine in a manner consistent with good air pollution control practices.  
[40 CFR §60.4243(b)(2)(ii)]
- e. The Permittee shall operate and maintain the natural gas-fired peak shaving generator (**ID No. ES-1NG**) that achieves the emission standards as required in Section 2.1.J.3.c, above, over the entire life of the engine. [40 CFR 60.4234]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the compliance requirements above are not met.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

- f. The Permittee shall keep the following records:
  - i. All notifications submitted to comply with 40 CFR 60 and all documentation supporting any notification.
  - ii. Maintenance conducted on the engine.  
[40 CFR 60.4245(a), 60.4243(b)(2)(ii)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these recordkeeping requirements are not met.

**Reporting** [15A NCAC 02Q .0508(f)]

- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit must be clearly identified.

**4. 15A NCAC 02D .1111: GACT Subpart ZZZZ**

(New internal combustion engines, located at a minor source.)

- a. **Stationary RICE subject to Regulations under 40 CFR Part 60.** An affected source that is a new or reconstructed stationary spark ignition RICE located at an area source must meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart JJJJ (See Section 2.1.J. 3., of this permit, above). No further requirements apply for such engines under Part 63.

## **2.2- Multiple Emission Source(s) Specific Limitations and Conditions**

### **A. Facility-wide affected sources**

#### **1. 15A NCAC 02Q. 0317: Avoidance Conditions**

##### **for 15A NCAC 02D .1111: Maximum Achievable Control Technology**

- a. In order to remain classified as a minor source for hazardous air pollutants and avoid applicability of this regulation, the facility-wide emissions shall be less than:

- i. 10 tons per year of each hazardous air pollutant, and
- ii. 25 tons per year of all hazardous air pollutants combined.

The Permittee shall be deemed in noncompliance with this condition and 2D .1111 (MACT Subpart MMMM, "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products," MACT P PPPP "National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Standards" and MACT Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," If the emissions exceeds the limits as stated in Section 2.2 A. 1., of the permit, above.

##### **Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- b. To ensure that emissions are less than the 10/25 tons per year limits, the Permittee shall maintain monthly consumption records of each material used containing hazardous air pollutants (HAPs):
- i. Material Safety Data Sheets (MSDS) or formulation data for cements, inks, paints, and solvents in the manufacturing process,
  - ii. Usage of production related cements, inks, paints, solvents, and other production materials containing hazardous air pollutants,
  - iii. Use of the latest AP-42 factors in calculating the HAPs emissions from combustion sources (natural gas-fired boilers, natural gas-fired ovens, gas-fired generator and diesel-fired generators.
  - iv. Monthly production throughput data necessary to calculate hazardous air pollutant emissions, and
  - v. Monthly hazardous air pollutant emissions calculations and 12-month rolling total hazardous air pollutant emissions calculations by the end of each month for the previous month.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the HAP emissions are not monitored or records are not maintained.

- c. The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the source is unaffected pursuant to 40 CFR Part 63.10(b)(3).  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records are not maintained.

##### **Reporting** [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
- i. the pounds of hazardous air pollutants emitted during the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
  - ii. the greatest quantity in pounds of an individual hazardous air pollutant emitted during the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

**B. Emission sources subject to Toxic Air Pollutant emission limits:**

- Seven diesel/ biodiesel/gasoline/natural gas engine test stands (3.0 MMBtu/hr maximum heat input capacity, each, ID Nos. ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, and ES-7NDTS),  
Twelve diesel/biodiesel/gasoline/natural gas engine test stands (3.0 MMBtu/hr maximum heat input capacity, each, ID Nos. ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, and ES-10DTS) and  
One diesel/ biodiesel/gasoline/natural gas engine test stand (1.8 million Btu per hour maximum heat input capacity, ID No. ES-18DTS)
- Paint Booths (ID Nos. ES-1SB through ES-5SB)

**State-enforceable only****1. 15A NCAC 2D .1100: TOXIC AIR POLLUTANT EMISSION LIMITATION AND REPORTING REQUIREMENTS**

- a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit(s) shall not be exceeded:

Emission Source(s)	Toxic Air Pollutant(s)	Emission Limit(s)
Paint booths (ID Nos. ES-1SB through ES-4SB)	Methyl Ethyl Ketone	1851.6 pounds per day 664.36 pounds per hour
Paint booths (ID Nos. ES-1SB through ES-5SB)	Ethyl Acetate	1050.97 pounds per hour
Paint booths (ID Nos. ES-1SB through ES-5SB)	Methyl Isobutyl Ketone	1281.12 pounds per day 225.21 pounds per hour
Paint booths (ID Nos. ES-1SB through ES-4SB)	Phenol	7.72 pounds per hour
Paint booths (ID Nos. ES-1SB through ES-5SB)	Toluene	2350.77 pounds per day 420.39 pounds per hour
Paint booths (ID Nos. ES-1SB through ES-5SB)	Xylene	1354.22 pounds per day 487.95 pounds per hour

- b. To ensure compliance with the above limits, the following restrictions shall apply:
- i. the total amount of diesel fuel combusted shall not exceed **450,000 gallons** in the test stands (ID Nos. **Seven engine test stands (ID Nos. ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, and ES-7NDTS)** per consecutive twelve month period.
  - ii. the total amount of gasoline fuel combusted shall not exceed **80,000 gallons** in the test stands (ID Nos. **Seven engine test stands (ID Nos. ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, and ES-7NDTS), Twelve engine test stands (ID Nos. ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, and ES-10DTS) and One engine test stand (ID No. ES-18DTS)** per consecutive twelve month period.
  - iii. for the two dry filter-type paint spray booths (ID Nos. **ES-3SB and ES-4SB**) the exhaust stack heights shall be at least 33 feet above ground level and shall not employ rain caps.
- c. For compliance purposes, within 30 days after each calendar year quarter the Permittee shall report the Regional Supervisor, DAQ, the total number of gallons of diesel fuel combusted and the number of gallons of **gasoline** fuel combusted in the test stands (ID Nos. **ES-1NDTS, ES-2NDTS, ES-3NDTS, ES-4NDTS, ES-5NDTS, ES-6NDTS, ES-7NDTS, ES-1PTS, ES-2PTS, ES-3PTS, ES-4PTS, ES-5PTS, ES-5PTS, ES-7PTS, ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, ES-10DTS, and ES-18DTS**) for each of the previous fourteen (14) months. The twelve-month totals must be calculated for each of the three twelve month periods over the previous fourteen months.

**C. Emission sources subject to PSD Avoidance limits:**

- **Fuel combustion equipment (ID Nos. ES-1PDO, ES-2PDO, ES-18DTS, ES-1NDTS through ES-7NTDS, ES-1PTS through ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, ES-10DTS, ES-2DG, ES-3ADG, ES-4DG through ES-8DG, ES-1NG, ES6, ES-1ES and ES-1EN)**
- **Surface coating and rust prevention equipment (ID Nos. ES-1SB through ES-5SB and ES-1RPS)**

**1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS****(Avoidance of 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)**

- a. In order to avoid applicability of this regulation, the fuel combustion sources (**ID Nos. ES-1PDO, ES-2PDO, ES-18DTS, ES-1NDTS through ES-7NTDS, ES-1PTS through ES-8PTS, ES-4DTS, ES-5DTS, ES-9DTS, ES-10DTS, ES-2DG, ES-3ADG, ES-4DG through ES-8DG, ES-1NG, ES6, ES-1ES and ES-1EN**) shall emit less than 250 tons per consecutive twelve (12) months period of NO<sub>x</sub> emissions. In addition, facility-wide volatile organic compound (VOC) emissions from the fuel combustion equipment and surface coating and rust prevention equipment (**ID Nos. ES-1SB through ES-5SB and ES-1RPS**) shall be less than 250 tons per consecutive twelve (12) month period. To ensure enforceability of these limits, the following restrictions shall apply:
- to limit NO<sub>x</sub> emissions:
    - The amount of diesel fuel combusted shall be less than **730,000 gallons per consecutive 12-month period; OR.**
    - The natural gas-fired peak shaving generator (**ID No. ES-1NG**) shall operate no more than 250 hours per consecutive 12-month period; **OR**
    - The amount of **gasoline fuel** combusted shall be less than **80,000 gallons per consecutive 12-month period.**
  - VOC emissions from surface coating operations shall be determined by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. This calculation and the total amount of VOC emissions from the fuel combustion, surface coatings and the rust prevention station must be recorded in a monthly emissions logbook.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

- b. i. The Permittee shall calculate the facility-wide monthly total NO<sub>x</sub> emissions using the following equations:

$$NO_x (TOTAL) = NO_x A \left[ \begin{array}{c} \text{Diesel-fired} \\ \text{peak shaving} \\ \text{generators} \end{array} \right] + NO_x B \left[ \begin{array}{c} \text{Natural gas-fired} \\ \text{peak shaving} \\ \text{generator} \end{array} \right] + NO_x C \left[ \begin{array}{c} \text{Natural gas-fired} \\ \text{boilers, ovens,} \\ \text{and washers} \end{array} \right] + NO_x D \text{ [Test stands]}$$

Where:

$$(A). NO_x \left[ \begin{array}{c} \text{Diesel-fired} \\ \text{peak shaving} \\ \text{generators} \end{array} \right] = \text{Diesel fuel used (gal)} \times \text{Diesel fuel Heat Input} \left( \frac{\text{Btu}}{\text{gal}} \right) \times \frac{\text{MMBtu}}{10^6 \text{ Btu}} \times EF \left( \frac{\text{lb NO}_x}{\text{MMBtu}} \right) \times \frac{\text{ton}}{2,000 \text{ lbs}}$$

Where:

$$\text{Diesel fuel Heat Input} \left( \frac{\text{Btu}}{\text{gal}} \right) = 137,000$$

$$NO_x \text{ Emissions Factor (EF)} \left( \frac{\text{lb NO}_x}{\text{MMBtu}} \right) = 3.2$$

$$(B) NO_x \left[ \begin{array}{c} \text{Natural gas-fired} \\ \text{peak shaving} \\ \text{generator} \end{array} \right] = \text{Hours of operation (hrs)} \times \text{Max. Heat Input Rate} \left( \frac{\text{MMBtu}}{\text{hr}} \right) \times EF \left( \frac{\text{lb NO}_x}{\text{MMBtu}} \right) \times \frac{\text{ton}}{2,000 \text{ lbs}}$$

Where:

$$\text{Natural gas-fired peak shaving generator Max. Heat Input} \left( \frac{\text{MMBtu}}{\text{hr}} \right) = 20$$



Natural gas Emission Factor (EF)  $\left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) = 4.08$

$$(C) \quad \text{NO}_x \left[ \begin{array}{c} \text{Natural gas-fired} \\ \text{boilers, ovens,} \\ \text{and washers} \end{array} \right] = \text{Natural gas used (ft}^3\text{)} \times \text{Natural gas Heat Input } \left(\frac{\text{Btu}}{\text{ft}^3}\right) \times \frac{\text{MMBtu}}{10^6 \text{ Btu}} \times \text{EF} \left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) \times \frac{\text{ton}}{2,000 \text{ lbs}}$$

Where:

Natural gas Heat Input  $\left(\frac{\text{Btu}}{\text{ft}^3}\right) = 1,020$

Natural gas Emission Factor (EF)  $\left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) = 0.098$

$$(D) \quad \text{NO}_x [\text{Test stands}] = \text{Diesel fuel used (gal)} \times \text{Diesel fuel Heat Input } \left(\frac{\text{Btu}}{\text{gal}}\right) \times \frac{\text{MMBtu}}{10^6 \text{ Btu}} \times \text{EF}_{\text{Diesel fuel}} \left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) \times \frac{\text{ton}}{2,000 \text{ lbs}}$$

$$+ \text{Natural gas used (ft}^3\text{)} \times \text{Natural gas Heat Input } \left(\frac{\text{Btu}}{\text{ft}^3}\right) \times \frac{\text{MMBtu}}{10^6 \text{ Btu}} \times \text{EF}_{\text{Natural gas}} \left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) \times \frac{\text{ton}}{2,000 \text{ lbs}}$$

$$+ \text{Gasoline used (gal)} \times \text{Gasoline Heat Input } \left(\frac{\text{Btu}}{\text{gal}}\right) \times \frac{\text{MMBtu}}{10^6 \text{ Btu}} \times \text{EF}_{\text{Gasoline}} \left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) \times \frac{\text{ton}}{2,000 \text{ lbs}}$$

Where:

Diesel fuel Heat Input  $\left(\frac{\text{Btu}}{\text{gal}}\right) = 137,000$

EF<sub>Diesel fuel</sub>  $\left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) = 4.41$

Natural gas Heat Input  $\left(\frac{\text{Btu}}{\text{ft}^3}\right) = 1,020$

EF<sub>Natural gas</sub>  $\left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) = 4.08$

Gasoline Heat Input  $\left(\frac{\text{Btu}}{\text{gal}}\right) = 130,000$

EF<sub>Gasoline</sub>  $\left(\frac{\text{lb NO}_x}{\text{MMBtu}}\right) = 1.63$

- ii. The Permittee shall calculate **monthly** total gallons of gasoline and diesel fuel and the cubic feet of natural gas combusted in the facility.
- iii. The Permittee shall record **monthly** the number of gallons of diesel and gasoline fuel and the cubic feet of natural gas combusted and the monthly NO<sub>x</sub> emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the Permittee fails to calculate and record the monthly facility-wide total NO<sub>x</sub> emissions or fails to calculate and record the gallons of gasoline and diesel fuel and the cubic feet of natural gas combusted in the facility as per Section 2.2 C. 1. b. i., through iii., of this permit.

- c. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of VOC containing materials or the VOC emissions are not monitored and recorded.
- d. The Permittee shall record the hours of operation of the natural gas-fired peak shaving generator (**ID No. ES-1NG**) each month for the previous 12-month period. The NO<sub>x</sub> emissions from the natural gas-fired peak shaving generator must be included in the monthly NO<sub>x</sub> emissions calculation in Section **2.2 C.1. b. (B)**, above.

**Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a semi-annual summary report of monitoring and recordkeeping activities postmarked on

or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

- i. the number of gallons of gasoline and diesel fuel and the cubic feet of natural gas combusted per month,
- ii. the hours of operation of the natural gas-fired peak shaving generator (**ID No. ES-1NG**),
- iii. the monthly NO<sub>x</sub> emissions,
- iv. the monthly VOC emissions,

The emissions must be calculated for each of the 12-month periods over the previous 17 months;

## 2.3 Permit Shield for Non-applicable Requirements

- A. Pursuant to 15A NCAC 02Q .0512(a)(1)(B) the Permittee is shielded from the following the below mentioned MACTs are included in nonapplicable requirements:
- MACT Subpart DDDDD - “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters,”
  - MACT Subpart MMMM - “National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products,” and
  - MACT Subpart PPPPP – “National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stand.”
  - MACT Subpart HHHHHH - “National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources” is not applicable to ES-1SB through ES-5SB, and ES-1RPS because the facility uses *no target HAP containing coating*, as defined at 40 CFR 63.11180.
  - MACT Subpart JJJJJJ – “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources” because each *gas-fired boiler*, as defined at 63.11237, is exempt from this subpart pursuant to 63.11195(e).
  - MACT Subpart XXXXXX – “National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories” is not applicable to ES-1SB through ES-5SB, and ES-1RPS because the facility does not conduct spray painting operations using *material containing metal fabrication or finishing metal HAP (MFHAP)*, as defined at 40 CFR 63.11522.
- [15A NCAC 02Q .0512(a)(1)(B)]
- B. The permit shields in this section do not apply to future modifications or changes in the method of operation.
- [15A NCAC 2Q .0512(a)(1)]

## SECTION 3 - GENERAL CONDITIONS (version 5.4, 07/20/2020)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance  
North Carolina Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]  
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]  
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]  
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]  
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]  
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements  
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
  - a. changes in the information submitted in the application;
  - b. changes that modify equipment or processes; or
  - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
  - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
  - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
    - i. the changes are not a modification under Title I of the Federal Clean Air Act;
    - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
    - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
    - iv. the Permittee shall attach the notice to the relevant permit.
  - c. The written notification shall include:
    - i. a description of the change;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]  
The Permittee may make changes in the operation or emissions without revising the permit if:
  - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
  - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]  
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

**I.A. Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

**"Excess Emissions"** - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

**"Deviations"** - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

**Excess Emissions**

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - name and location of the facility;
      - nature and cause of the malfunction or breakdown;
      - time when the malfunction or breakdown is first observed;
      - expected duration; and
      - estimated rate of emissions;
    - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

**Permit Deviations**

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

**I.B. Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

**J. Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.

3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;

2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
  - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such



authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) – FEDERALLY-ENFORCEABLE ONLY**

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

**GG. Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

**HH. Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

**II. Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

**JJ. General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

**KK. Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;

- c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
  3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
  4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
  5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

**LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]**

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

**MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]**

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

**NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]**

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;
  - c. any change in emissions; and
  - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

**OO. Third Party Participation and EPA Review [15A NCAC 02Q .0521, .0522 and .0525(7)]**

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

## ATTACHMENT

### List of Acronyms

<b>AOS</b>	Alternative Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>BAE</b>	Baseline Actual Emissions
<b>Btu</b>	British thermal unit
<b>CAA</b>	Clean Air Act
<b>CAM</b>	Compliance Assurance Monitoring
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>CSAPR</b>	Cross-State Air Pollution Rule
<b>DAQ</b>	Division of Air Quality
<b>DEQ</b>	Department of Environmental Quality
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>GHGs</b>	Greenhouse Gases
<b>HAP</b>	Hazardous Air Pollutant
<b>LAER</b>	Lowest Achievable Emission Rate
<b>MACT</b>	Maximum Achievable Control Technology
<b>NAA</b>	Non-Attainment Area
<b>NAAQS</b>	National Ambient Air Quality Standards
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAP</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>NSR</b>	New Source Review
<b>OAH</b>	Office of Administrative Hearings
<b>PAE</b>	Projected Actual Emissions
<b>PAL</b>	Plantwide Applicability Limitation
<b>PM</b>	Particulate Matter
<b>PM<sub>2.5</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>PTE</b>	Potential to Emit
<b>RACT</b>	Reasonably Available Control Technology
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>TAP</b>	Toxic Air Pollutant
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound